



# Internal Audit Report

Library District  
November 2000



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# Internal Audit Department

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November 3, 2000

Andrew Kunasek, Chairman, Board of Supervisors  
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We have completed our FY 2001 review of the Maricopa County Library District (MCLD). The audit was performed in accordance with the annual audit plan that was approved by the Board of Supervisors. Overall, we found MCLD operations to be effective and in compliance with applicable laws, regulations, and County policies. We also identified areas for improvement. These, along with our recommendations, are detailed in the attached report. The report highlights are:

- Access security controls over MCLD automated systems are weak. These control weaknesses diminish the reliability of data, increase security risks, and may result in computer service interruptions.
- MCLD does not report its performance in measures that can be used to make meaningful comparisons, internally or with other libraries. Without complete and meaningful performance data, the district is unable to accurately determine the effectiveness of its operations and programs.
- MCLD operates in overall compliance with applicable County administrative requirements. Some control weaknesses were identified that expose the district to financial risk.

Attached are the report summary, detailed findings, recommendations, and MCLD's response. We have reviewed this information with the MCLD Director and appreciate the excellent cooperation provided by management and staff. If you have questions or wish to discuss items presented in this report, please contact George Miller at 506-1586.

Sincerely,

A handwritten signature in cursive script that reads "Ross L. Tate".

Ross L. Tate  
County Auditor

cc: Fran McCarroll, Clerk of the Board of Supervisors  
David Smith, County Administrative Officer  
Bill Scalzo, Chief Community Services Officer  
Harry Courtright, MCLD Director/County Librarian  
Tom Manos, Chief Financial Officer  
Lin Thatcher, Chief Information Technology Officer  
Audit Committee Members



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## **Executive Summary**

### **Systems User Access (Page 9)**

MCLD's user access security controls are weak. The district has not developed written policies and procedures for establishing user access and does not require written authorization for implementing user accounts within its systems. Furthermore, some user access levels appear excessive for current job responsibilities. Inadequate user access controls diminish the reliability of data and increase the risk of destruction or inappropriate disclosure of data. MCLD should strengthen its user access controls.

### **Computer Room Security, Backup, and Recovery (Page 11)**

MCLD has established adequate environmental controls (e.g., air conditioning, fire suppression) over its computer room. However, physical access controls to restrict entry to and exit from the room appear weak. MCLD has also not developed a current business continuity plan or any type of off-site storage rotation for backup tapes, ensuring continued business operations in case of disaster. Inadequate physical security and business continuity planning may result in computer service interruptions, physical damage, unauthorized disclosure of information, expensive recovery efforts, and theft. MCLD should strengthen the physical security over its computer room access and backup and recovery controls through proper disaster recovery planning.

### **Administrative Activities (Page 13)**

MCLD operates in overall compliance with applicable County administrative requirements; no material exceptions were identified during our testing. Some control weaknesses were identified over employee payroll and change funds that expose the district to financial risk. MCLD should strengthen controls over these areas.

## **Purchasing Transactions (Page 14)**

Our testing of MCLD contract and non-contract purchase transactions, made via purchase order and Procurement Card, found the district to be in compliance with County policy requirements. All purchases were properly authorized, made in accordance with applicable pricing terms and provisions, and all ordered items were verified as having been received. No exceptions were found.

## **Benchmarking Activities (Page 15)**

MCLD does not report its performance in measures that can be used to make meaningful comparisons internally or with other libraries, because its Circulation Populations (critical statistic) have not been determined. Without accurate and meaningful performance data, MCLD is unable to determine the effectiveness of its operations and programs. MCLD management should find out the district's Circulation Populations, calculate and track significant performance indicators, and use this information to make strategic decisions.



# Introduction

## Background

The Maricopa County Library District (MCLD) was created in accordance with the County Free Library District law (Arizona House Bill #2372) of 1986. This law gave counties authority to create library districts and assess a separate secondary property tax to fund the district's operations.

MCLD currently operates two regional libraries, ten branches, and three bookmobiles to serve County residents living in both urban areas and rural communities. Arizona Revised Statutes (ARS) 11-901 through 11-913, 15-362, 41-1337, 41-3000.16, and 48-3901 through 48-3904 regulate district operations. The Maricopa County Board of Supervisors (Board) serves as MCLD's Board of Directors.

The district has established Intergovernmental Agreements (IGA) with the cities having MCLD branches. The district leases the facilities that serve as branch libraries.

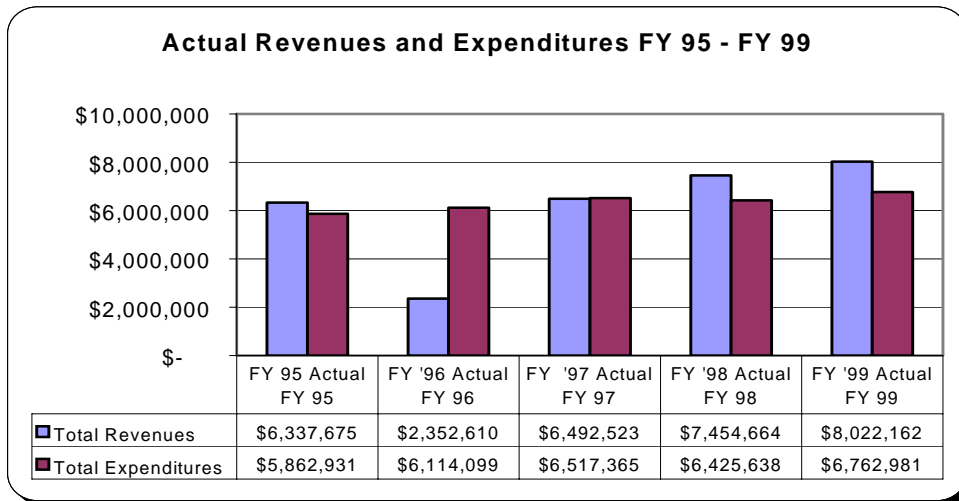
## Mission

MCLD's stated mission is: "Maricopa County Library District, through cooperative partnerships with other libraries, agencies and communities, provides universal access to information to all county residents, especially the unserved and underserved." The district has developed written program and operational goals and prepares quarterly update status reports.

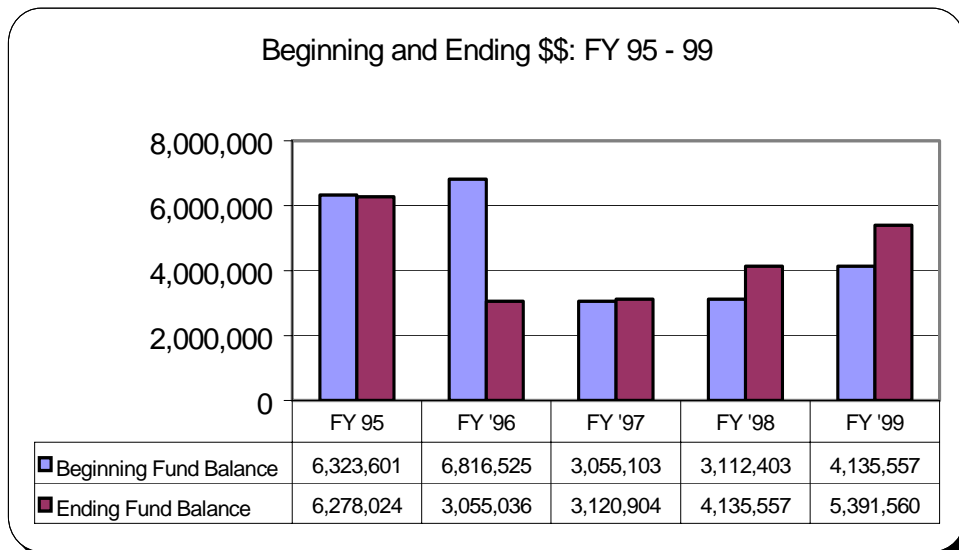
## Financial Information

MCLD tax revenue funds the district's operations and to help fund eleven local municipalities' libraries through a Reciprocal Borrowing Program. The two charts on the following page show MCLD's revenues, expenditures, and fund balances for FY 1994-95 through FY 1998-99.

## MCLD Revenues and Expenditures



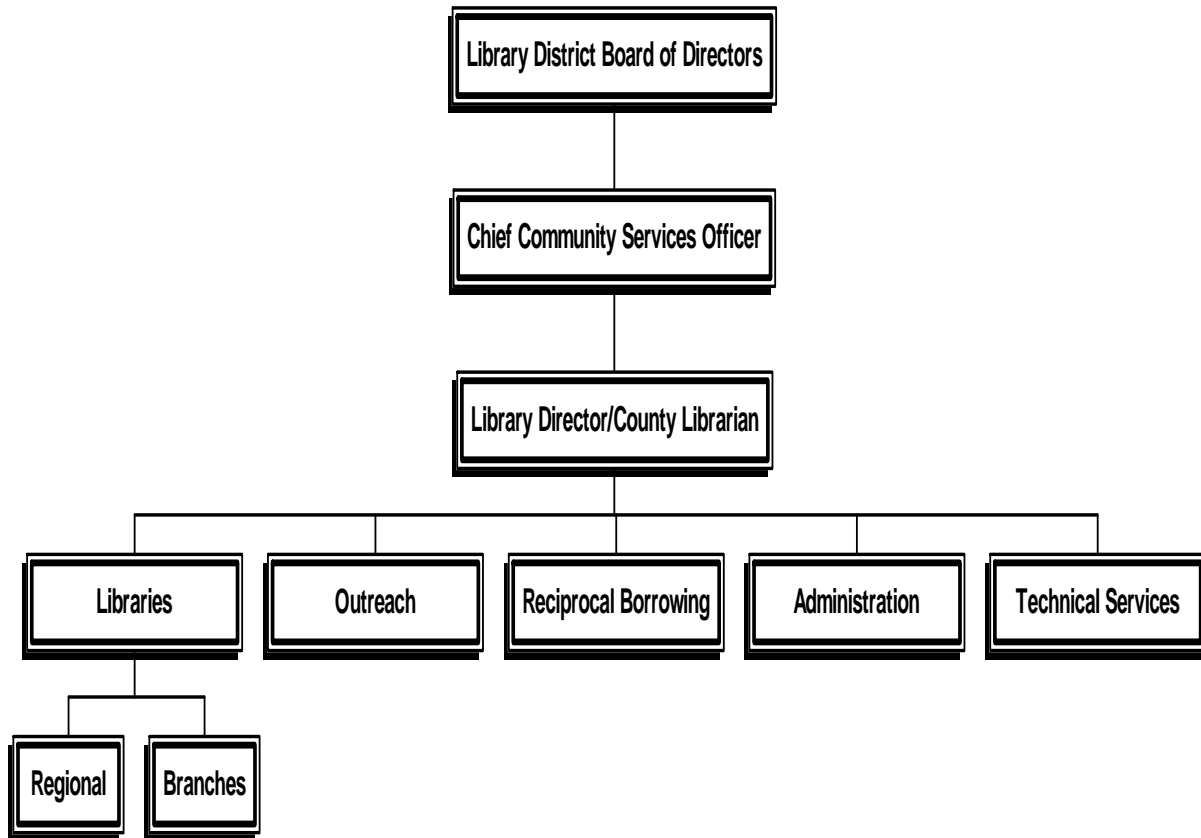
## MCLD Fund Balance



During the County's financial crisis of FY 1995-96, the MCLD tax rate was lowered by 75 percent for the one year. The district used its fund balance to help pay for operating expenses. During FY 1998-99, approximately \$800,000 of MCLD revenue was distributed to the eleven local cities that participate in MCLD's Reciprocal Borrowing Program.

## Organizational Structure

The chart below shows MCLD's organizational structure. The district employs 162 persons that are assigned to five operating divisions.



## Outreach Services & Reciprocal Borrowing Programs

In addition to MCLD's two regional libraries and ten small branch libraries, the district operates outreach programs that include Bookmobiles, Books by Mail, Lobby Stops, Deposit Stops and Special Tours. Three MCLD Bookmobiles service individuals residing in at-risk communities, geographically remote schools, and retirement homes within the County. The Bookmobiles, containing an eclectic collection of 16,000 books, are operated by one full-time and one part-time employee. Bookmobile operators drive the vehicles to various County locations according to a quarterly schedule.

As previously identified, MCLD has established a Reciprocal Borrowing Program, which allows County citizens to use the library facilities of any participating city free of charge. Residents of the eleven cities can similarly use MCLD's facilities. During FY 1999-2000, approximately 64,000 County and city residents obtained library cards from libraries outside of their residential jurisdiction, as a result of the program. Formal agreements have been developed between the district and eleven local area cities.

## Scope and Methodology

Our audit objectives were to:

- Assess the adequacy of controls over MCLD contract administration, vendor payment, and monitoring activities
- Evaluate controls over fixed asset tracking and reporting
- Determine the adequacy of internal controls over the district's information systems
- Test controls over MCLD employee payroll activities.

The audit was performed in accordance with Government Auditing Standards.

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## Department-Reported Accomplishments

**The following recent accomplishments were provided to the Internal Audit Department by MCLD management for inclusion in this report.**

The MCLD has been extremely active in finding ways to better meet our customer needs. To do this:

- Branch hours were increased, and staff in smaller branches was increased without the need for additional funding.
- Resources were increased to allow full access to all electronic resources at all branches and from customers' homes. These resources include books in electronic form, "Rating Zone," a reader's advisory service, and "Chapter-A-Day" email service. In addition, no branch has less than 5 Internet access computers and the Regional libraries have in excess of 70 Internet access computers for customer use.
- A marketing plan for the Library District has been completed and includes a new marketing icon, a new 'library card' design, a new Library District brochure, and a new "Welcome to the District" brochure. All these use the new marketing icon, which will soon be on all signs, both interior and exterior, at all branches.
- Circulation of library materials topped 2 million for the first time and a new daily high for circulation of 13,744 was reached on June 1st. At the same time, the number of hits on the Library District homepage topped 38 million, with 7% of this use being from customers' homes.
- A new building in Guadalupe will open in October 2000, a new building in Fountain Hills is expected to be open in March 2001, and the renovations of the North Central Regional Library will be completed by November 2000.
- While continuing to meet a growing demand for services, we have maintained a sound financial base. No increase has been needed in the tax rate for the District while our budget grew from \$7.3 to over \$9 million. At the same time, our Reserve fund also grew to ensure adequate funds for future planned projects including both Northwest and Southwest Regional Libraries, a new branch at Anthem and possible branches in the White Tanks area.
- The Avondale Public Library joined the District and is participating in the Reciprocal Borrowing Program. Only two public libraries in the county now do not participate in this program which allows any county resident to use any public library at no cost to the patron.

# Issue 1 Systems User Access

## Summary

MCLD's user access security controls are weak. The district has not developed written policies and procedures for establishing user access and does not require written authorization for implementing user accounts within its systems. Furthermore, some user access levels appear excessive for current job responsibilities. Inadequate user access controls diminish the reliability of data and increase the risk of destruction or inappropriate disclosure of data. MCLD should strengthen its user access controls.

## Requirements

*Generally Accepted Principles and Practices for Securing Information Technology Systems*, published by the U.S. Department of Commerce's National Institute of Standards and Technology states, "system access should be based on the principle of least privilege, which states that users should be granted access only to resources they need to perform their official functions." Controls should be adequate to ensure access to the data is secure and limited. Adequate security helps prevent fraudulent activity and errors.

## Review Results

MCLD has not developed written policies or procedures for establishing user access to its systems. Furthermore, written authorization is not required for granting user access levels. Other user access control weaknesses found are:

- Twenty-five generic user accounts have been created. Generic accounts remove all accountability for transactions performed on the system and can lead to fraud or abuse.
- 32 (29%) of the 112 active user IDs have password expiration dates of 120 days or longer; one expires in 730 days and another has no expiration date.
- A standardized user ID format has not been established; first name, last name, and even nicknames have been used, which makes identifying "owners" of user ID's more difficult.
- Additional user access levels have been given to employees with overlapping job responsibilities. While extra system capabilities may be required, the user access levels given appear excessive (e.g., users are given override or system manager abilities when change, delete, or add ability may be adequate).
- Two users were found to have excessive system access based on their current job responsibilities.

## **Recommendation**

MCLD should:

- A. Develop written procedures for establishing, changing, and deleting user access to its systems. The procedures should include guidelines for instituting sound password controls and synchronizing (e.g., 60 days) expiration dates between the VMS operating system and the network.
- B. Consider developing a system access form requiring written authorization for all user access requests, with the proper level of user access for each job function determined by management.
- C. Review all current user access levels and make necessary changes to ensure each user's access level is based on their current job responsibilities.
- D. Determine whether generic user accounts can be eliminated and, if so, eliminate these accounts.
- E. Develop and implement a standard for establishing user ID's that considers all possibilities needed to ensure that ID's are easily identifiable and unique (e.g., first five letters of user's last name and first letter of first name).



## Issue 2 Computer Room Security, Backup, and Recovery

### Summary

MCLD has established adequate environmental controls (e.g., air conditioning, fire suppression) over its computer room. However, physical access controls to restrict entry to and exit from the room appear weak. MCLD has also not developed a current business continuity plan or any type of off-site storage rotation for backup tapes, ensuring continued business operations in case of disaster. Inadequate physical security and business continuity planning may result in computer service interruptions, physical damage, unauthorized disclosure of information, expensive recovery efforts, and theft. MCLD should strengthen the physical security over its computer room access and backup and recovery controls through proper disaster recovery planning.

### Requirements

*The Federal Information System Controls Audit Manual (FISCAM)* published by the General Accounting Office states that entities should have a cost-effective process for protecting data files, application programs, and hardware through physical security controls. Physical security controls restrict physical access to computer resources and protect them from intentional or unintentional loss or impairment. Data center access should only be given to those employees with a job-related need.

FISCAM also states that departments should establish procedures to protect information resources and minimize the risk of unplanned interruptions and develop a plan to recover critical operations if interruptions occur.

### Review Results

MCLD's computer room is equipped with a dedicated air conditioning unit, fire suppression devices and an uninterrupted power supply. MCLD currently allows 42 people to have active access to the computer room; one is not a district employee.

The district performs system backups nightly and the backup tapes are kept in a locked fireproof safe within the computer room. However, an off-site storage rotation for backup tapes has not been established. Also, Friday's backup is not placed in the safe until Monday morning since safe access is limited and current procedures have library operations employees performing backups.

MCLD has not developed a current information systems disaster recovery plan or a business continuity plan. A continuity plan was developed for the Year 2000 roll-over, however, the plan is specific to that event and while pieces of the plan would be useful, the plan is not complete as a business continuity plan.

## **Recommendation**

MCLD should:

- A. Immediately review which employees have access to the computer room and limit access to only employees with a job-related need to enter the room.
- B. Establish an off-site storage rotation for its backup tapes to help ensure continued business and information systems operations for all potential disaster (e.g., those requiring re-establishment at remote locations).
- C. Expand its current contingency plan to develop a comprehensive business continuity plan to ensure continued business operations in the event of a disaster. The plan should be tested periodically.
- D. Designate information systems personnel to perform weekend backup procedures to ensure backup tapes are kept securely in the safe, which will also limit the number of staff with access to the computer room.

## Issue 3 Administrative Activities

### Summary

MCLD operates in overall compliance with applicable County administrative requirements; no material exceptions were identified during our testing. Some control weaknesses were identified over employee payroll and change funds that expose the department to financial risk. MCLD should strengthen controls over these areas.

### Requirements

The Maricopa County Administrative Manual, Procurement Code, and Financial Policies Manual contain policies and procedural requirements for administrative activities performed by County departments. The American Institute of Certified Public Accountants recommends that payroll duties should be segregated, to the extent possible, to ensure that unauthorized payments are not made.

### Activities and Review Results

During the preliminary survey work we selected several MCLD administrative activities, performed on a regular basis, to test for policy compliance and to assess the adequacy of internal controls. The activities examined and test results are summarized below.

- Employee payroll: MCLD has not adequately segregated payroll duties. The same employee inputs, picks-up, and distributes payroll. Our testing of MCLD payroll found no exceptions or other control weaknesses.
- Fixed assets: MCLD adequately monitors and reconciles department vehicles and other assets to the asset lists generated by the Department of Finance (DOF) and Equipment Services Department. No exceptions or control weaknesses were found.
- Change Funds: MCLD's \$220 change fund was split between the ten branch library locations, without required documentation or DOF approval.

### Recommendation

MCLD should initiate the following actions to strengthen internal controls, ensure full compliance with County policy requirements, and reduce financial risk:

- A. Adequately segregate employee payroll duties
- B. Establish separate change funds and custodians, through DOF, for each library branch.

## Issue 4 Purchasing Transactions

### Summary

Our testing of MCLD contract and non-contract purchase transactions, made via purchase order and Procurement Card, found the district to be in compliance with County policy requirements. All purchases were properly authorized, made in accordance with applicable pricing terms and provisions, and all ordered items were verified as having been received. No exceptions were found.

### Applicable Requirements

MCLD's print services contracts outline specific categories of books (e.g., adult fiction hardcover) authorized for purchase, shows specific price discounts by category, and defines payment terms and conditions. Maricopa County Procurement Card (P-Card) guidelines require:

- Dollar limits be established for an individual cardholder, per transaction, per month, and that these limits must not be exceeded
- Departments to maintain a transaction log for all purchases
- Single transactions with a vendor for an item or groupings of similar items shall not exceed \$1,000 for non-contract purchases.

During March 2000, the Materials Management Department reviewed MCLD's P-Card transactions and found that the district had made non-contract purchases exceeding \$1,000. The Materials Management Department recommended that MCLD "Review Certified Agency Procurement Aide procedures and ensure that any purchase does not exceed \$1,000 for items not on contract."

### Purchase Order and P-Card Transaction Testing

We tested MCLD purchases made from two print service contracts. We found that the district has established adequate controls to ensure that all purchases are made in accordance with contract pricing terms and provisions. Vendor billing invoices are not authorized for payment until the district has verified, in writing, that ordered items have been received. Both the P-Card log and purchase orders clearly identified the contract number associated with the purchases.

We tested MCLD P-Card transactions, made after the Materials Management Department review, to verify if the district had strengthened internal controls. We found no P-Card transactions made for non-contract purchases exceeding \$1,000 and no exceptions to County policy requirements.

### Recommendation

None, for information only.

## Issue 5 Benchmarking Information

### Summary

MCLD does not report its performance in measures that can be used to make meaningful comparisons internally or with other libraries, because its Circulation Populations (critical statistic) have not been determined. Without accurate and meaningful performance data, MCLD is unable to determine the effectiveness of its operations and programs. MCLD management should find out the district's Circulation Populations, calculate and track significant performance indicators, and use this information to make strategic decisions.

### Performance Measures

The International City and County Management Association (ICMA) uses eight statistics to compare libraries' operational performance. Seven of these statistics utilize "Circulation Population" to calculate the measure. Circulation Population is defined as the number of people living within a ten-mile radius of a library facility. Another national library organization (HAPLR) uses Circulation Population in eight of its fifteen benchmark performance measures.

We attempted to benchmark MCLD's performance with other comparably sized library districts nationally and internally, for the district's individual branches. We found that MCLD calculates and reports statistics on circulation, registered patrons, programs presented, and attendance. However, the district does not have Circulation Population data for its main or branch library facilities. The MCLD Financial Administrator reports that the district has attempted to obtain this information but, to date, has not been successful.

Based on the statistics that MCLD calculates, we found the following:

- The Bookmobile and other Outreach Programs ranked sixth overall among the thirteen library branches in 1999, contributing a circulation of 43,056 (2%) to the MCLD's total circulation of 2,118,185.
- MCLD Queen Creek branch's Circulation per Registered Patron (ICMA performance measure) ranked first in the district and the Outreach Program ranked second.

Another important performance measure, used by ICMA and HAPLR, to determine the success of a library program is "Usage Rate". However, without knowing its Circulation Populations, MCLD is unable to utilize Usage Rate as a criteria for adding or deleting programs. MCLD is also unable to report its standing in relation to national norms or how its branches perform in relation to each other.

## **Recommendation**

MCLD should:

- A. Obtain Circulation Population figures for each branch, begin tracking performance indicators, and report the results to County management on a regular basis
- B. Calculate and track Usage Rates for all branches and programs and utilize this data to efficiently staff library facilities and add/delete programs.

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## **DEPARTMENT RESPONSE**